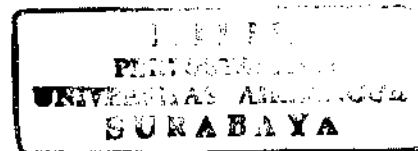


STREPTOMYCES GRISEUS

# SKRIPSI

NUR MASITA

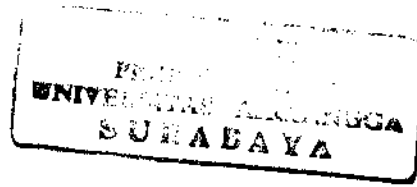
**OPTIMASI PENGGUNAAN AMPAS TAHU  
(SUMBER N) DALAM MEDIA ISP-4 DAN MEDIA  
NaCl 0,9 % PADA PERTUMBUHAN *Streptomyces*  
*griseus***



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN KIMIA FARMASI  
SURABAYA**

**2003**

**LEMBAR PENGESAHAN**



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**SKRIPSI**

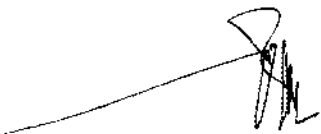
**Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Sains Pada  
Fakultas Farmasi Universitas Airlangga  
Surabaya  
2003**

**Disusun oleh :**

**Nur Masita**

**059912136**

**Disetujui oleh :**

A handwritten signature in black ink, appearing to be "Dra. Noor Erma NS, MS., Apt".

**Dra. Noor Erma NS, MS., Apt**  
**Dosen Pembimbing Utama**

A handwritten signature in black ink, appearing to be "Drs. Soebahagiono, Apt".

**Drs. Soebahagiono, Apt**  
**Dosen Pembimbing Serta**

## ABSTRACT

Refuse of tofu can be used as the growth medium of bacteria. Based on analysis that the waste of tofu production still contains protein 21-29% w/w of the dry material. Besides, the waste of tofu production also contains more than 18 kinds of amino acids. This study used 6 kinds of formulas. The Formula A containing 0,5% refuse of tofu in ISP-4 medium. The Formula B, C and D successive containing 0,5%; 1,0% and 2,0% refuse of tofu in ISP-4 medium without  $(\text{NH}_4)_2\text{SO}_4$ . The formula E and F each containing 1,0% and 2,0% refuse of tofu in NaCl 0,9% medium.

The results from scratching *Streptomyces griseus* ATCC 10137 cells on 6 kinds of formulas show that in the formula B, C and D, growth of *Streptomyces griseus* was more rapid and more abundant. The next research with Plating methods for counting the number of colonies shows that the formula B can grow *Streptomyces griseus* more rapid and abundant than formula C and D. Growth measurements in liquid medium, plating methods shows that The growth of *Streptomyces griseus* ATCC 10137 reaches optimum in formula B. In This medium the number of colonies increase rapidly. Gravimetry methods based on dry cell weight shows that the formula B is the optimal medium for growing *Streptomyces griseus* according to slope value highly.

Based on this case, it can be concluded that the formula B which contain 0,5% refuse of tofu in ISP-4 medium without  $(\text{NH}_4)_2\text{SO}_4$  is the optimal medium for growing *Streptomyces griseus* ATCC 10137.

Keyword: Refuse of tofu, source of nitrogen, number of colonies, dry cell weight, *Streptomyces griseus*, refuse of tofu concentration.